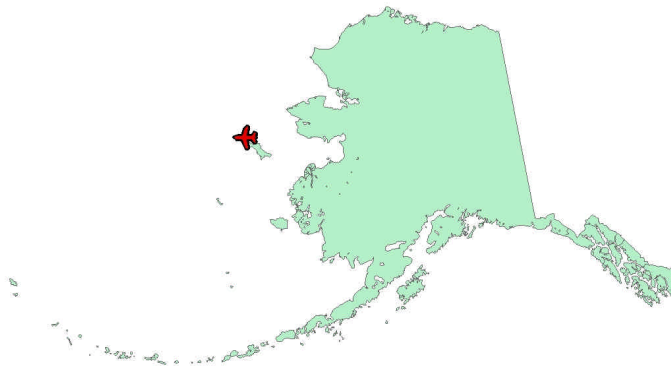


# GAMBELL AIRPORT



## 2004 Alaska Airport Pavement Condition Report

Scott Gartin, P.E.  
State Pavement Engineer  
Statewide Materials Section, Alaska DOT&PF  
5800 E. Tudor Road  
Phone: (907) 269-6244 Fax: (907) 269-6231  
Email: [scott\\_gartin@dot.state.ak.us](mailto:scott_gartin@dot.state.ak.us)

Maps and report compiled by  
H. June Finkbiner  
Central Region Materials, Alaska DOT&PF

# **GAMBELL AIRPORT - 2004**

## **Contents:**

- A Pavement Strength Form showing project history, latest Pavement Condition Index (PCI) data, pavement strength ratings (if available) and other useful information
- A Pavement Condition Survey – PCI Sample Unit Layout Plan
- PCI maps showing predicted pavement conditions
- Age map showing pavement age as of January 2004
- A Branch PCI Condition Report
- A Section PCI Condition Report

## **Airport Information:**

- Location:  
Gambell is located on the northwest tip of Saint Lawrence Island in the Bering Sea, approximately 190 miles east south east of Nome. The airport is located on a narrow sand-gravel spit just south of the village. The Bering Sea borders the west side of the runway and Troutman Lake borders it on the east.
- District: Western District of the Northern Region
- Airport Manager: Jerry Oliver
- District Maintenance Manager: Patrick Kelliher
- Pavement Surface: Asphalt Concrete
- Last Pavement Construction: 1999
- Pavement layout: Runway 16-34, Taxiway A and Apron.
- Design Aircraft: DC-6
- 2003 Enplanements: 3,743 – a 40% increase from 2002
- Airport Class: Non-Primary
- Last pavement condition survey: 2002
- Next planned pavement condition survey: 2005
- 2004 reported pavement maintenance and/or changed conditions: Needs crack sealing, but not done this year. It requires a fairly major mobilization to bring crack sealing equipment, personnel and manpower to do.
- Recommendations: Seal cracks that are over 1/4" wide and patch with cold mix as needed to maintain serviceability. Get a crew, materials and equipment there in 2005 to seal the cracks and patch.

Date: 4 /8/2003

# Branch Condition Report

Pavement Database: NetworkID: Gambell

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
100 (Taxiway A)	2	1,069.00	50.00	58,434.00	TAXIWAY	50.00	16.00	60.42
4100 (Apron)	1	292.00	200.00	61,200.00	APRON	77.00	0.00	77.00
6100 (RUNWAY 16-34)	2	4,532.00	100.00	453,200.01	RUNWAY	44.50	0.50	44.33

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	1	61,200.00	77.00	0.00	77.00
RUNWAY	2	453,200.01	44.50	0.50	44.33
TAXIWAY	2	58,434.00	50.00	16.00	60.42
<b>All</b>	<b>5</b>	<b>572,834.01</b>	<b>53.20</b>	<b>15.82</b>	<b>49.46</b>

Date: 4 /8/2003

## Section Condition Report

Page 1 of 2

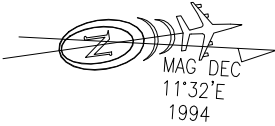
Pavement Database: NetworkID: Gambell

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
100 (Taxiway A)	100-01	08/01/1985	AC	TAXIWAY	P	0	10,184.00	07/17/2002	17	34.00
100 (Taxiway A)	100-02	08/01/1999	AC	TAXIWAY	P	0	48,250.00	07/17/2002	3	66.00
4100 (Apron)	4100-01	08/01/1999	AC	APRON	P	0	61,200.00	07/17/2002	3	77.00
6100 (RUNWAY 16-34)	6100-01	08/15/1985	AAC	RUNWAY	P	0	305,000.01	07/17/2002	17	44.00
6100 (RUNWAY 16-34)	6100-02	08/15/1985	AAC	RUNWAY	P	0	148,200.00	07/17/2002	17	45.00

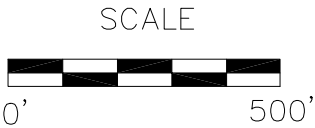
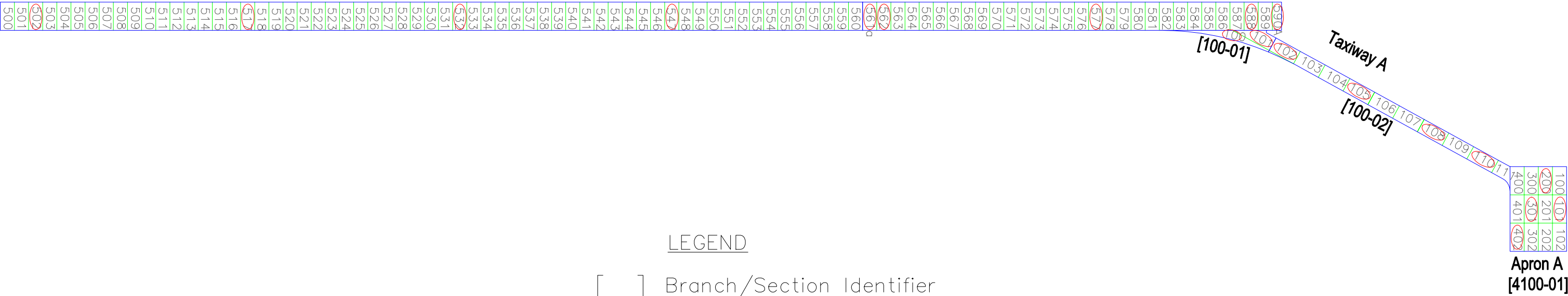
<b>Age Category</b>	<b>Average Age At Inspection</b>	<b>Total Area (SqFt)</b>	<b>Number of Sections</b>	<b>Arithmetic Average PCI</b>	<b>PCI Standard Deviation</b>	<b>Weighted Average PCI</b>
03-05	<b>3.00</b>	<b>109,450.00</b>	<b>2</b>	<b>71.50</b>	<b>5.50</b>	<b>72.15</b>
16-20	<b>17.00</b>	<b>463,384.01</b>	<b>3</b>	<b>41.00</b>	<b>4.97</b>	<b>44.10</b>
<b>All</b>	<b>11.40</b>	<b>572,834.01</b>	<b>5</b>	<b>53.20</b>	<b>15.82</b>	<b>49.46</b>

## PAVEMENT STRENGTH SURVEY

[illegible]



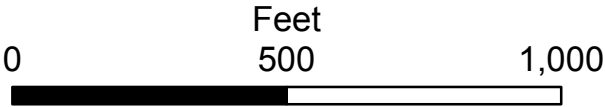
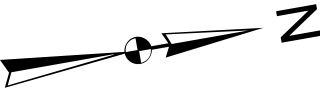
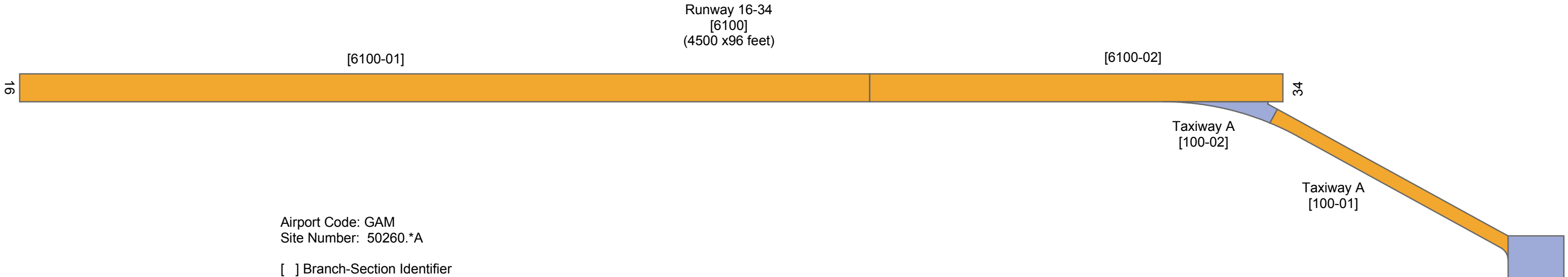
Runway 16-34 [6100-01]  
(4500 x 96 feet)





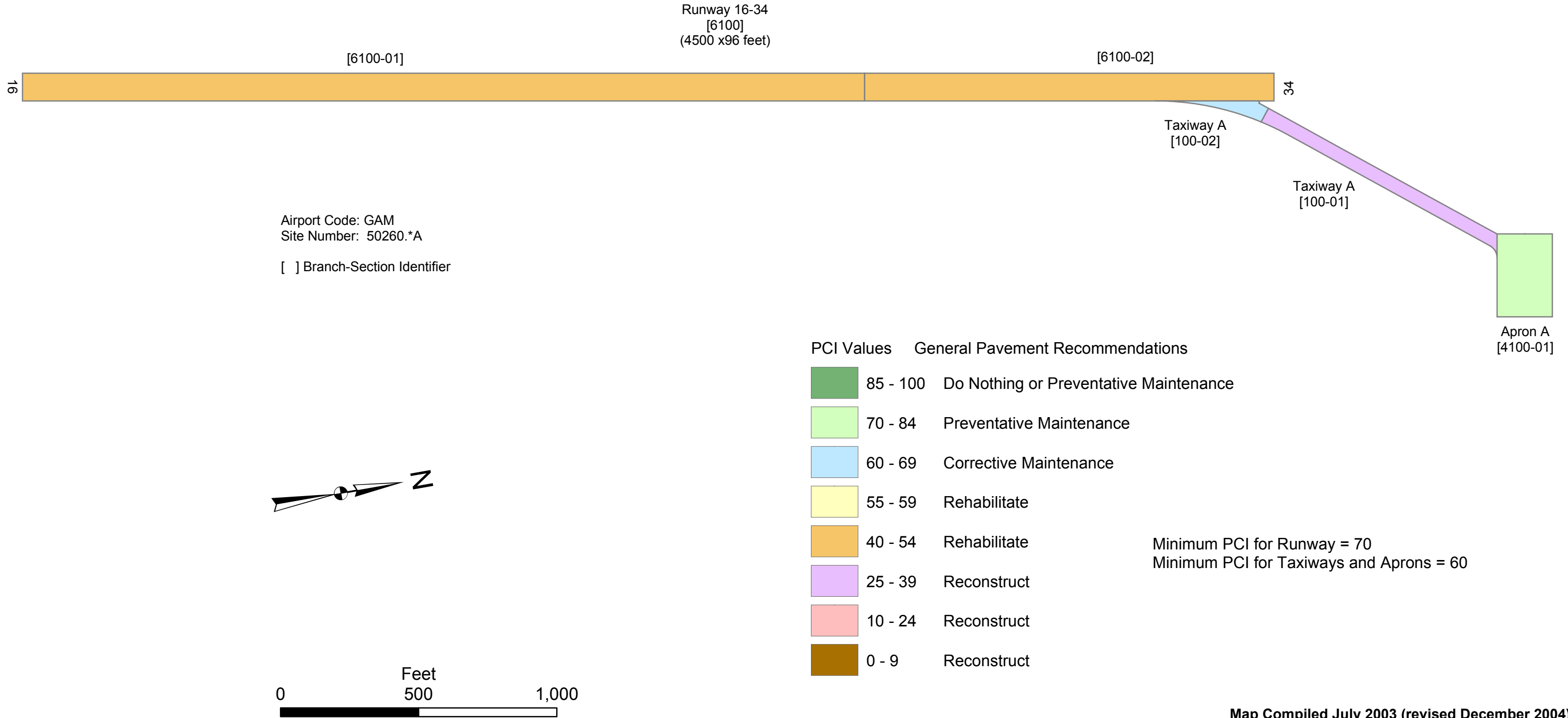
# Gambell Airport

Pavement Surface Age  
2004



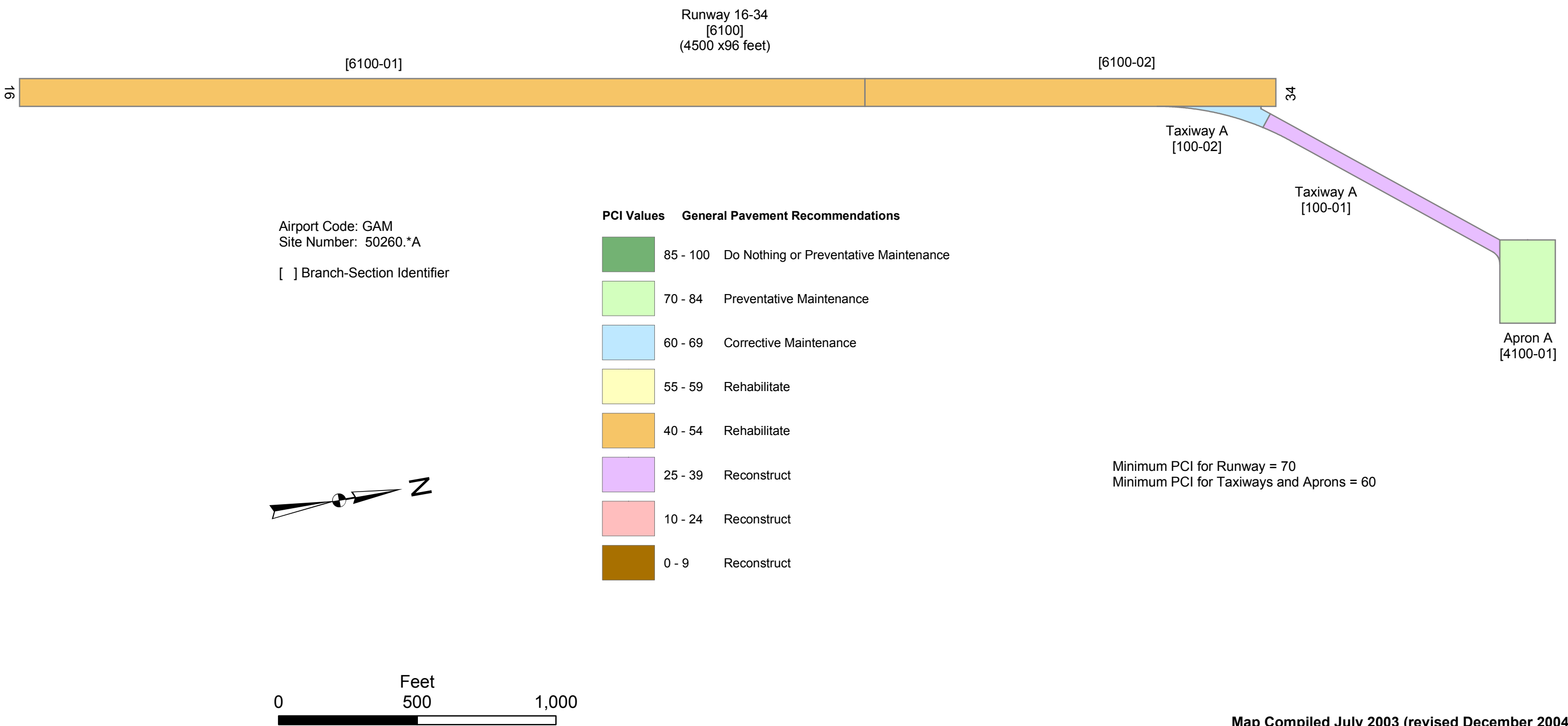
# Gambell Airport

Pavement Condition Index (PCI)  
Measured Values for the Year 2002



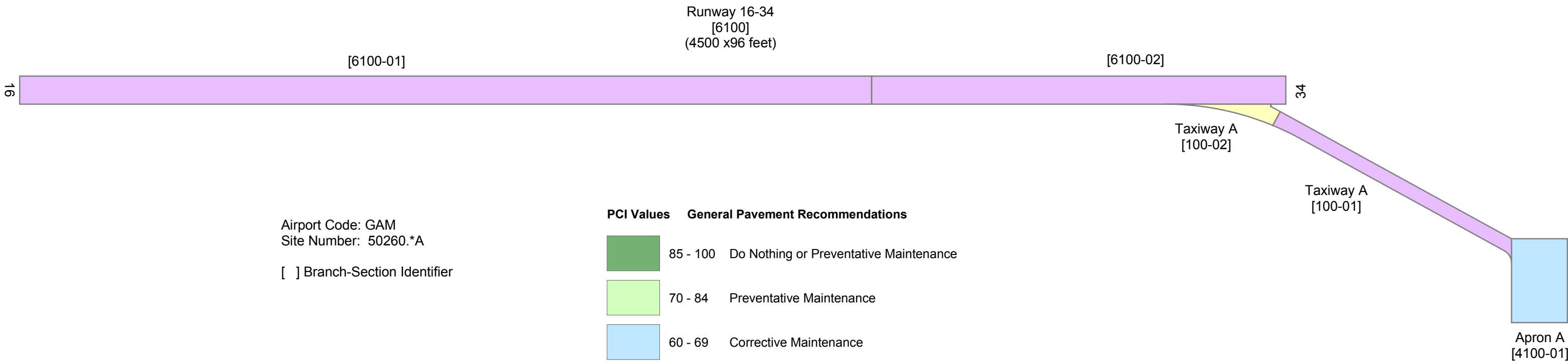
# Gambell Airport

Pavement Condition Index (PCI)  
Predicted Values for the Year 2003



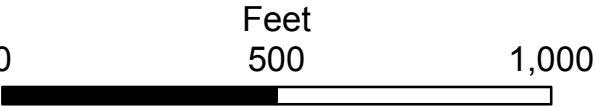
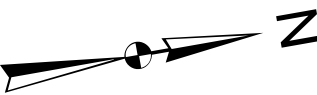
# Gambell Airport

Pavement Condition Index (PCI)  
Predicted Values for the Year 2004



Airport Code: GAM  
Site Number: 50260.\*A  
[ ] Branch-Section Identifier

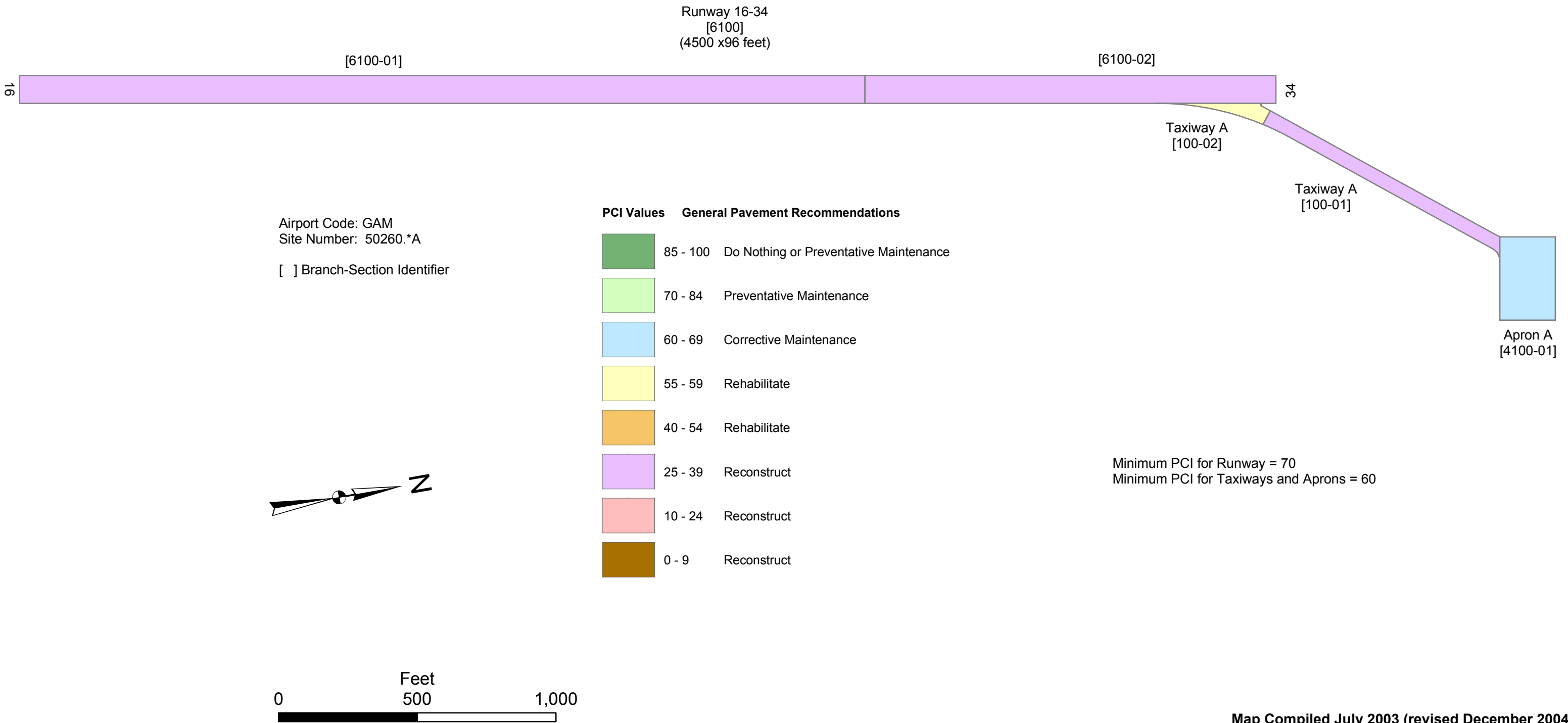
PCI Values		General Pavement Recommendations
<div></div>	85 - 100	Do Nothing or Preventative Maintenance
<div></div>	70 - 84	Preventative Maintenance
<div></div>	60 - 69	Corrective Maintenance
<div></div>	55 - 59	Rehabilitate
<div></div>	40 - 54	Rehabilitate
<div></div>	25 - 39	Reconstruct
<div></div>	10 - 24	Reconstruct
<div></div>	0 - 9	Reconstruct



Minimum PCI for Runway = 70  
Minimum PCI for Taxiways and Aprons = 60

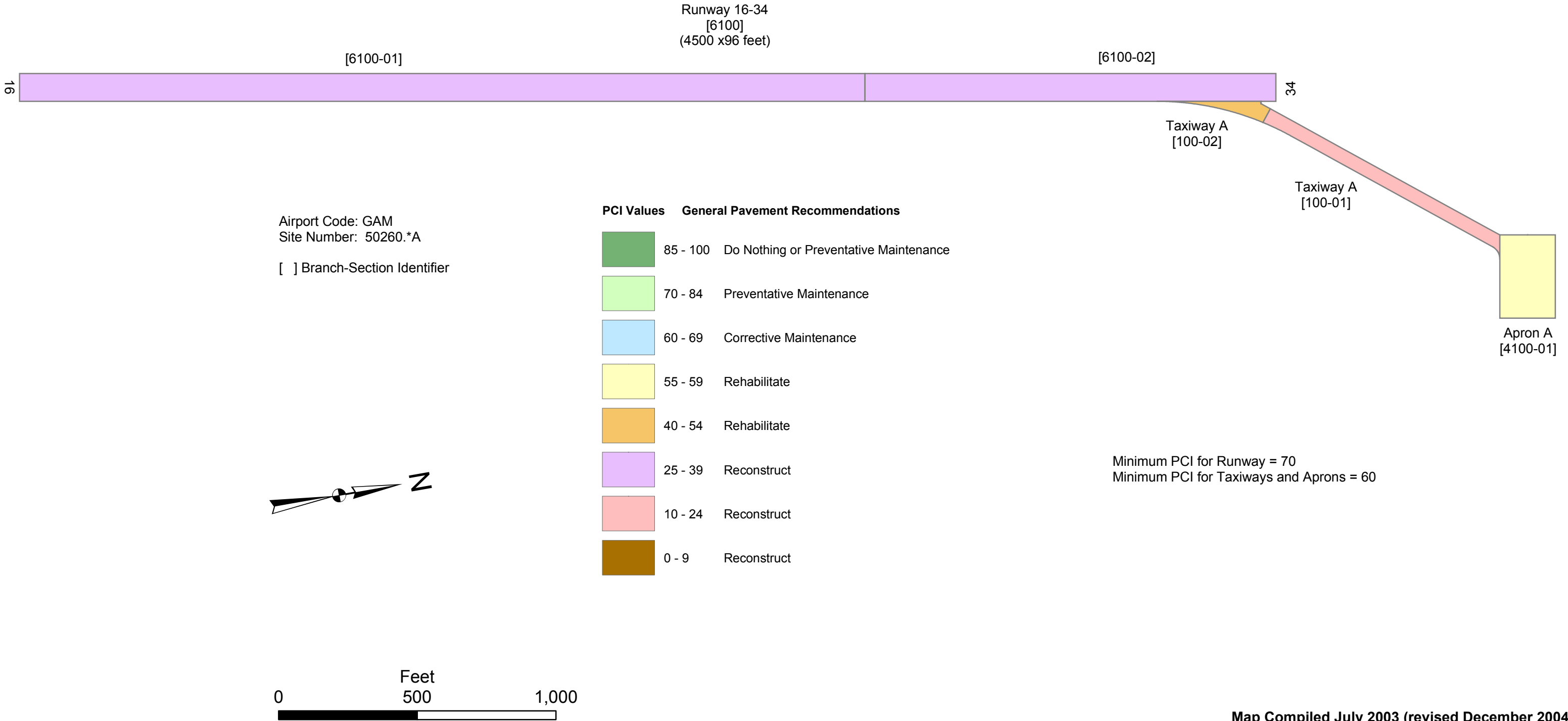
# Gambell Airport

Pavement Condition Index (PCI)  
Predicted Values for the Year 2005



# Gambell Airport

Pavement Condition Index (PCI)  
Predicted Values for the Year 2006



# Gambell Airport

Pavement Condition Index (PCI)  
Predicted Values for the Year 2007

